

# Mathematics - A Level (Edexcel)

A Level Mathematics is a rigorous maths course that builds upon GCSE Mathematics, developing your algebra and creative problem-solving skills to gain a deeper understanding of the beauty and breadth of mathematics. You will build analytic tools to use in a wide variety of other courses such as science, economics and computing.

The course allows you to hone your pure mathematics skills in algebra and develop new skills in calculus (the theory of change), trigonometry, infinite series, numerical methods and vectors, improving your creative problem-solving skills and looking at the mathematical proof. You will also apply your knowledge of mathematics to the realm of statistics and mechanics. In statistics you will be analysing data and drawing conclusions from large data sets about real-world situations and in mechanics you will look at how forces, gravity and motion work.

This course is available for international students, if you are applying as an international student please click [here](#).

## WHAT WILL I STUDY?

Topics covered can include:

- Pure Maths
- Proof
- Algebra and functions
- Coordinate geometry in the  $(x, y)$  plane
- Sequences and series
- Trigonometry
- Exponentials and logarithms
- Differentiation
- Integration
- Numerical methods
- Vectors
- Statistics and Mechanics
- Statistical sampling
- Data presentation and interpretation
- Probability
- Statistical distributions
- Statistical hypothesis testing
- Quantities and units in mechanics
- Kinematics

**Start Date: 1 September 2025**

**Duration: 2 Years**

**Attendance: Full Time**

**Center: Angel Sixth Form College**

<https://www.capitalccg.ac.uk/course/pdf/11456/>

- Forces and Newton's laws
- Moments

## WHAT WILL I NEED?

You will need:

- Grade 5 or above in GCSE English Language
- Grade 7 or above in GCSE Maths
- Three further GCSEs at grade 4 or above

If you wish to study 4 A Levels, you will need 7 GCSEs at grade 7 or above, including two at grade 8.

All applicants must have an interview to confirm that A Levels are suitable for them.

When applying for an A Level programme at City and Islington, please refer to the general entry requirements on our [A Level Courses](#) page as well as the subject-specific details listed above.

## HOW WILL I BE ASSESSED?

There will be three exams, each lasting for two hours at the end of the two-year course. Two of the exams will test your pure mathematics skills and one exam will be on the applied aspects of mathematics.

## WHAT WILL IT COST?

AGED 16-18

If you will be aged 16, 17 or 18 on 31st August prior to the start date of your course and you have the legal right to remain in the UK for the duration of your programme then your study with us will be free. Please see [here](#) for the documents you will need to show us.

Some courses will have other associated costs, such as for specialist materials and trips. Many of our students are eligible for financial support, see [here](#) for details.

## WHAT CAN I DO AFTER?

A Levels are widely regarded as the standard entry qualification for top universities in the UK, and the rest of the world. Many of our students go on to study for a degree at the university of their choice, with some choosing to progress into apprenticeships or other employment.

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